What is claimed:

1. A method for microscopic visualization of a sample comprising:
   (a) intensifying the light emanating from the sample; and
   (b) directly observing a light image provided by the intensified light.

2. The method of claim 1, wherein said light intensifying and observing occurs in real time.

3. The method of any one of claims 1 or 2, further comprising the step of controlling the power output of an illumination source to a desired intensity.

4. The method of claim 3, wherein the desired intensity is such that light emanating from the sample is not optimal for direct visual observation, and wherein said intensifying the light yields a visible image that is observable to the human eye.

5. The method of any one of claims 1-4, further comprising converting the light that is emanating from the sample in non-visible wavelengths of light to light that is in the visible light spectrum.

6. The method of claim 5, wherein said observing includes observing the light image provided by the converted intensified light.

7. The method of any one of claims 5 or 6, wherein the non-visible light is in one of a near-infrared spectral range or a far-red spectral range.

8. The method of any one of claims 5 or 6, wherein the non-visible light is in the ultraviolet spectral range.

9. The method of any one of claims 1-8, further comprising providing an visual converter that is configured and arranged so as to intensify the light received at an input end and to provide an image at an output end and wherein said observing includes observing the image at the output end.

10. The method of claim 9, wherein the visual converter is located in the optical light path between the sample and an observer such that the light from the sample is received at the visual converter input end.

11. The method of any one of claims 9 or 10, wherein the visual converter is located so that an input face of a light intensifying device is one of at or proximal the intermediate image plane of the microscopic imaging device.

12. The method of any of any of claims 9-11, further providing a plurality of the visual converters, one visual converter being located in each optical light path so as to allow stereoscopic imaging.

13. The method of claim 12, wherein the plurality of the visual converters are arranged so as to allow binocular vision of the intensified light.

14. The method of any one of claims 9-13, wherein the visual converter is configured and arranged such that light being received at the input end is intensified so as to provide a visible image at the output end thereof.

15. The method of claim 14, further comprising the step of controlling the power output of an illumination source to a desired intensity.

16. The method of claim 15, wherein the desired intensity is such that light emanating from the sample is not optimal for direct visual observation, and wherein said intensifying the light yields a visible image that is observable to the human eye.

17. The method of any one of claims 9-16, wherein the visual converter is configured and arranged so that light being received at the input end that is in a non-visible light spectral range is converted to provide a light image that is in the visible light spectral range at the output end thereof.

18. The method of claim 17, wherein the non-visible light is in one of a near-infrared spectral range or a far-red spectral range.

19. The method of claim 17, wherein the non-visible light is in a ultraviolet spectral range.

20. An visual converter device comprising:

(a) an electro-optical device that is sensitive to light in a wavelength range of interest and configured to intensify light in the wavelength range of interest focused on its input face to an image that can be directly visualized at the output face thereof; and

(b) a housing in which the electro-optical device is contained, which housing is configured and arranged to operably couple the visual converter to a microscopic imaging device and to minimize external stray light from being observed at the output face of the electro-optical device.

21. The visual converter device of claim 20, wherein said electro-optical device intensifies the light that is focused on its input face to light that is in the visible light spectral range.

22. The visual converter device of claim 21, wherein the power output of an illumination source is controlled to a desired intensity.

23. The visual converter device of claim 22, wherein the desired intensity is such that light emanating from the sample is not optimal for direct visual observation, and wherein said intensifying the light yields a visible image that is observable to the human eye.

24. The visual converter device of any of claims 20-23, wherein said electro-optical device converts the light that is focused on its input face in non-visible light spectral ranges to light that is in the visible light spectral range.

25. The visual converter device of claim 24, wherein the non-visible light is in one of a near-infrared spectral range or a far-red spectral range.

26. The visual converter device of claim 24, wherein the non-visible light is in a ultraviolet spectral range.

27. A microscopic imaging system comprising:

(a) a microscopic imaging device; and

(b) a visual converter device of any one of claims 20-26 operably coupled to the microscopic imaging device, wherein the visual converter device is located in the optical light path between the sample and an output end of the microscopic imaging device, such that the light from the sample is received at the visual converter input end.

28. The microscopic imaging system of claim 27, wherein the visual converter device is located so that the input face of the light intensifying device is one of at or proximal to the intermediate image plane of the microscopic imaging device.

29. The microscopic imaging system of any one of claims 27-28, further providing a plurality of the visual converters, one visual converter being located in each optical light path so as to allow stereoscopic imaging.

30. The microscopic imaging system of claim 29, wherein the plurality of the visual converters are arranged so as to allow binocular vision of the intensified light.

31. The microscopic imaging system of any one of claims 29 or 30, wherein said electro-optical device intensifies the light that is focused on its input face to light that is in the visible light range.

32. The microscopic imaging system of claim 31, wherein the power output of an illumination source is controlled to a desired intensity.

33. The microscopic imaging system of claim 32, wherein the desired intensity is such that light emanating from the sample is not optimal for direct visual observation, and wherein said intensifying the light yields a visible image that is observable to the human eye.

34. The microscopic imaging system of any one of claims 28-33, wherein the visual converter is configured and arranged such that light being received at the input end that is in a non-visible light spectral range is converted so as to provide a visible image at the output end thereof.

35. The microscopic imaging system of claim 34, wherein the non-visible light is in one of a near-infrared spectral range or a far-red spectral range.

36. The microscopic imaging system of claim 34, wherein the non-visible light is in an ultraviolet spectral range.